








Create a table named Country with fields: Id Country_name Population Area


Result Grid			Filter Rows:	<input type="text"/>	Edit
	Id	Country_name	Population	Area	
▶	1	India	1393409038	3287263	
	2	China	1444216107	9596961	
	3	USA	331002651	9833517	
	4	Indonesia	273523615	1904569	
	5	Pakistan	220892340	881912	
	6	Brazil	212559417	8515767	
	7	Nigeria	206139589	923768	
	8	Bangladesh	161376708	147570	
	9	Russia	145934462	17098242	
	10	Mexico	128932753	1964375	
▲	NULL	NULL	NULL	NULL	
Country1 14 ▼					

Create another table named Persons with fields: Id Fname Lname Population Rating Country_Id Country_name

Result Grid			Filter Rows:	<input type="text"/>	Edit:			
	Id	Fname	Lname	Population	Rating	Country_Id		
▶	1	John	Doe	500000	4.5	1		
	2	Jane	Smith	600000	4.0	2		
	3	Ahmed	Khan	200000	3.9	3		
	4	Maria	Garcia	450000	4.6	4		
	5	Chen	Wei	700000	3.8	5		
	6	Anna	Ivanova	300000	4.2	6		
	7	Lucas	Silva	750000	4.3	7		
	8	Fatima	Ali	550000	3.7	8		
	9	Olga	Petrova	800000	4.4	9		
	10	Carlos	Martinez	100000	4.1	10		
▲	NULL	NULL	NULL	NULL	NULL	NULL		
Persons1 15 ×								

-- 1. Write an SQL query to print the first three characters of Country_name from the Country table.

```
SELECT LEFT(Country_name, 3) AS FirstThreeChars FROM Country1;
```



The screenshot shows a 'Result Grid' window with a single column header 'FirstThreeChars'. The grid contains 12 rows of data, each representing the first three characters of a country name. The rows are: Ind, Chi, USA, Ind, Pak, Bra, Nig, Ban, Rus, and Mex. The first row is expanded, showing a right-pointing triangle icon to its left.

FirstThreeChars
Ind
Chi
USA
Ind
Pak
Bra
Nig
Ban
Rus
Mex

-- 2. Write an SQL query to concatenate first name and last name from Persons table.

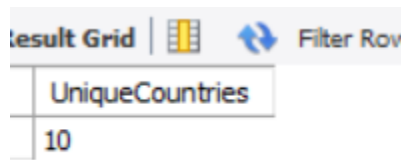
```
SELECT CONCAT(Fname, ' ', Lname) AS FullName FROM Persons1;
```



The screenshot shows a 'Result Grid' window with a single column header 'FullName'. The grid contains 12 rows of data, each representing the full name of a person. The rows are: John Doe, Jane Smith, Ahmed Khan, Maria Garcia, Chen Wei, Anna Ivanova, Lucas Silva, Fatima Ali, Olga Petrova, and Carlos Martinez. The first row is expanded, showing a right-pointing triangle icon to its left.

FullName
John Doe
Jane Smith
Ahmed Khan
Maria Garcia
Chen Wei
Anna Ivanova
Lucas Silva
Fatima Ali
Olga Petrova
Carlos Martinez

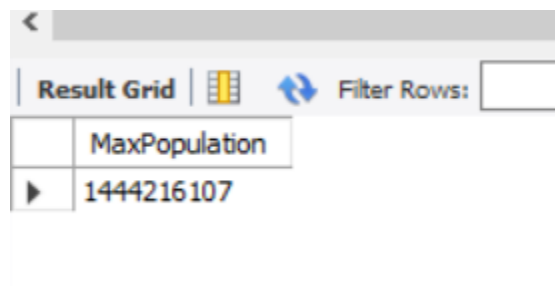
-- 3. Write an SQL query to count the number of unique country names from Persons table
SELECT COUNT(DISTINCT Country_Id) AS UniqueCountries FROM Persons1;



The screenshot shows a database interface with a 'Result Grid' tab. The grid has two columns: 'UniqueCountries' and a value '10'. Above the grid, there are icons for a grid, a refresh button, and a 'Filter Rows' label.

UniqueCountries
10

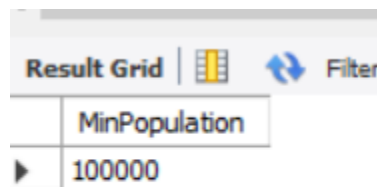
-- 4. Write a query to print the maximum population from the Country table.
SELECT MAX(Population) AS MaxPopulation FROM Country1;



The screenshot shows a database interface with a 'Result Grid' tab. The grid has two columns: 'MaxPopulation' and a value '1444216107'. Above the grid, there are icons for a grid, a refresh button, and a 'Filter Rows' label with an input field.

MaxPopulation
1444216107

-- 5. Write a query to print the minimum population from Persons table.
SELECT MIN(Population) AS MinPopulation FROM Persons1;



The screenshot shows a database interface with a 'Result Grid' tab. The grid has two columns: 'MinPopulation' and a value '100000'. Above the grid, there are icons for a grid, a refresh button, and a 'Filter' label.

MinPopulation
100000

-- 6. Insert 2 new rows to the Persons table making the Lname NULL. Then write another query to count Lname from Persons table.

```
INSERT INTO Persons1 (Id, Fname, Lname, Population, Rating, Country_Id)
VALUES
(11, 'Ali', NULL, 150000, 4.2, 2),
(12, 'Sara', NULL, 200000, 3.5, 4);
```

SELECT * FROM Persons1;

Result Grid						
Filter Rows:				Edit:		
	Id	Fname	Lname	Population	Rating	Country_Id
▶	1	John	Doe	500000	4.5	1
	2	Jane	Smith	600000	4.0	2
	3	Ahmed	Khan	200000	3.9	3
	4	Maria	Garcia	450000	4.6	4
	5	Chen	Wei	700000	3.8	5
	6	Anna	Ivanova	300000	4.2	6
	7	Lucas	Silva	750000	4.3	7
	8	Fatima	Ali	550000	3.7	8
	9	Olga	Petrova	800000	4.4	9
	10	Carlos	Martinez	100000	4.1	10
	11	Ali	NULL	150000	4.2	2
	12	Sara	NULL	200000	3.5	4

Persons1 21 x

SELECT COUNT(Lname) AS LnameCount FROM Persons1;

Result Grid	
Filter Rows:	
	LnameCount
▶	10

-- 7. Write a query to find the number of rows in the Persons table

SELECT COUNT(*) AS TotalRows FROM Persons1;

	TotalRows
▶	12

-- 8. Write an SQL query to show the population of the Country table for the first 3 rows. (Hint: Use LIMIT)

```
SELECT Population FROM Country LIMIT 3;
```

	Population
▶	1393409038
	1444216107
	331002651

-- 9. Write a query to print 3 random rows of countries. (Hint: Use rand() function and LIMIT)

```
SELECT * FROM Country1 ORDER BY RAND() LIMIT 3;
```

	Id	Country_name	Population	Area
▶	8	Bangladesh	161376708	147570
	7	Nigeria	206139589	923768
	6	Brazil	212559417	8515767
*	NULL	NULL	NULL	NULL

-- 10. List all persons ordered by their rating in descending order.

```
SELECT * FROM Persons1 ORDER BY Rating DESC;
```

Result Grid

 Filter Rows:

 Edit:



	<div>Id</div>	<div>Fname</div>	<div>Lname</div>	<div>Population</div>	<div>Rating</div>	<div>Country_Id</div>
▶	4	Maria	Garcia	450000	4.6	4
	1	John	Doe	500000	4.5	1
	9	Olga	Petrova	800000	4.4	9
	7	Lucas	Silva	750000	4.3	7
	6	Anna	Ivanova	300000	4.2	6
	11	Ali	NULL	150000	4.2	2
	10	Carlos	Martinez	100000	4.1	10
	2	Jane	Smith	600000	4.0	2
	3	Ahmed	Khan	200000	3.9	3
	5	Chen	Wei	700000	3.8	5
	8	Fatima	Ali	550000	3.7	8
	12	Sara	NULL	200000	3.5	4



-- 11. Find the total population for each country in the Persons table.

SELECT Country_Id, SUM(Population) AS TotalPopulation FROM Persons1 GROUP BY Country_Id;

Country_Id	TotalPopulation
1	500000
2	750000
3	200000
4	650000
5	700000
6	300000
7	750000
8	550000
9	800000
10	100000

- 13. List the total number of persons and average rating for each country, but only for
-- countries with more than 1 persons, ordered by the average rating in ascending order.

```
SELECT Country_Id, COUNT(*) AS TotalPersons, AVG(Rating) AS AvgRating  
FROM Persons1  
GROUP BY Country_Id  
HAVING COUNT(*) > 1  
ORDER BY AvgRating ASC;
```

Result Grid   Filter Rows: <input data-bbox="641 462 893 514" type="text"/>			
	Country_Id	TotalPersons	AvgRating
▶	4	2	4.05000
	2	2	4.10000